

AD-A035 823

DARCOM INTERN TRAINING CENTER TEXARKANA TEX
COMPUTER AIDED COST ESTIMATION FOR PRODUCTION ENGINEERS.(U)
MAR 76 C G SCOTT

F/G 14/1

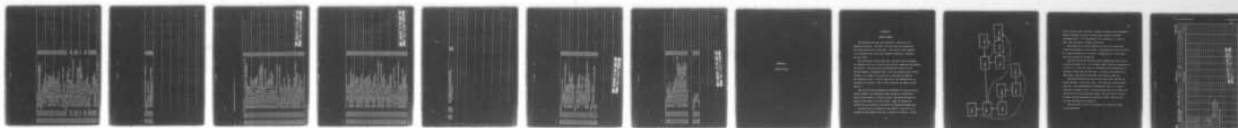
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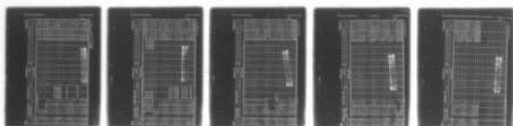
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END

DATE
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3-77



00397	00397	PURCHASED-PART-CHECK.	CE002
00398	00398	WRITE PRINT-LINE FROM BLANK-LINE AFTER ADVANCING 1.	CE002
00399	00399	WRITE PRINT-LINE FROM BLANK-LINE AFTER ADVANCING 1.	CE002
00400	00400	PURCHASED-PART-CHECK-A.	CE002
00401	00401	IF INFO-CODE IS EQUAL TO **	CE002
00402	00402	THEN GO TO SUB-ASSEMBLY-CHECK.	CE002
00403	00403	MULTIPLY INFO-PUR-QUAN BY INFO-PUR-COST	CE002
00404	00404	GIVING MATERIAL-COST.	CE002
00405	00405	MOVE INFO-PUR-QUAN TO PURCHASED-QUAN.	CE002
00406	00406	MOVE INFO-PUR-COST TO PURCHASE-PRICE.	CE002
00407	00407	MOVE INFO-PUR-DES TO PUR-DESCRIP.	CE002
00408	00408	ADD MATERIAL-COST TO SUB-TOTAL-MATERIAL.	CE002
00409	00409	MOVE MATERIAL-COST TO PUR-MATERIAL.	CE002
00410	00410	IF LINE-COUNT IS GREATER THAN 52	CE002
00411	00411	THEN PERFORM WRITE-HEADING-1.	CE002
00412	00412	WRITE PRINT-LINE FROM PURCHASED-PART-LINE	CE002
00413	00413	AFTER ADVANCING 1.	CE002
00414	00414	ADD 1 TO REC-3.	CE002
00415	00415	READ NODE-FILE INVALID KEY GO TO READ-A-RECORD.	CE002
00416	00416	GO TO PURCHASED-PART-CHECK-A.	CE002
00417	00417	SUB-ASSEMBLY-CHECK.	CE002
00418	00418	DISPLAY , SUBASSEMBLY-CHECK , UPON SYSOUT.	CE002
00419	00419	DISPLAY ***** INFO-CARD ***** UPON SYSOUT.	CE002
00420	00420	MOVE RECORD-KEY-ID TO SAVE-KEY.	CE002
00421	00421	MOVE INFO-SUB-QUAN TO SAVE-QUAN.	CE002
00422	00422	DISPLAY ,*** INFO-SUB-QUAN ,***, SAVE-QUAN UPON SYSOUT.	CE002
00423	00423	MOVE ZEROS TO REC-2, REC-3.	CE002
00424	00424	MOVE INFO-SUB-NODE TO REC-1.	CE002
00425	00425	READ NODE-FILE INVALID KEY GO TO READ-A-RECORD	CE002
00426	00426	DISPLAY ,***** INFO-CARD ,***** UPON SYSOUT.	CE002
00427	00427	MULTIPLY SAVE-QUAN BY INFO-COST GIVING MATERIAL-COST.	CE002
00428	00428	DISPLAY ,// , SAVE-QUAN ,// , INFO-COST ,// ,	CE002
00429	00429	MATERIAL-COST UPON SYSOUT.	CE002
00430	00430	MOVE INFO-D-1 TO INFO-D-2.	CE002
00431	00431	MOVE SAVE-QUAN TO NUMBER-DEEDED.	CE002
00432	00432	DISPLAY , STORE-IT UPON SYSOUT.	CE002
00433	00433	MOVE STORE-IT TO D-ITEM-DES.	CE002
00434	00434	MOVE ZEROS TO D-DP-NUMBER	CE002
00435	00435	D-TIME	CE002
00436	00436	D-RECURR, D-NONRECURR.	CE002
00437	00437	ADD MATERIAL-COST TO SUB-TOTAL-MATERIAL.	CE002
00438	00438	MOVE MATERIAL-COST TO D-MATERIAL.	CE002
00439	00439	DISPLAY , MATERIAL-COST ,-----, SUB-TOTAL-MATERIAL ,-----,	CE002
00440	00440	D-MATERIAL UPON SYSOUT	CE002

00441	004320	WRITE PRINT-LINE FROM DATALINE AFTER ADVANCING 1.	CE002
00442	004330	EXTRA-ASSY.	CE002
00443	004340	MUVE SAVE-KEY TO RECORD-KEY-ID.	CE002
00444	004350	ADL 1 TO REC-3.	CE002
00445	004360	READ NUDE-FILE INVALID KEY GO TO READ-A-RECORD.	CE002
00446	004370	GO TO PURCHASED-PART-CHECK-A.	CE002

00449	004370	WRITE-HEADING-2.	CE002
00449	004470	WRITE PRINT-LINE FROM ASTERISK-LINE AFTER ADVANCING 2 LINES.	CE002
00450	004410	WRITE PRINT-LINE FROM BLANK-LINE AFTER ADVANCING 1.	CE002
00451	004420	MOVE ZEROS TO I-OP-NUMBER.	CE002
00452	004430	MOVE SPACES TO U-ITEM-DES.	CE002
00453	004440	MOVE SUB-TOTAL-MATERIAL TO U-MATERIAL.	CE002
00454	004450	MOVE SUB-TOTAL-TIME TO P-STD-HRS.	CE002
00455	004460	MOVE SUB-TOTAL-TIME TO O-TIME.	CE002
00456	004470	MOVE SUB-TOTAL-REC-TOOL TO U-RECURR.	CE002
00457	004480	MOVE SUB-TOTAL-NON-REC TO U-NONRECURR.	CE002
00458	004490	MOVE P-TOTAL TO U-ITEM-DES.	CE002
00459	004500	WRITE PRINT-LINE FROM DATALINE AFTER ADVANCING 1.	CE002
00460	004510	WRITE PRINT-LINE FROM BLANK-LINE AFTER ADVANCING 1.	CE002
00461	004520	WRITE PRINT-LINE FROM ASTERISK-LINE AFTER ADVANCING 1.	CE002
00462	004530	MOVE ZEROS TO REC-2, REC-3.	CE002
00463	004540	READ MODE-FILE INVALID KEY GO TO FINISH-REPORT.	CE002
00464	004550	MOVE INFO-ITEM-FEE TO P-FEE.	CE002
00465	004560	MOVE INFO-ITEM-G-A TO P-G-AND-A.	CE002
00466	004570	MOVE INFO-ITEM--SCRAP TO P-REWORK.	CE002
00467	004580	MOVE INFO-ITEM-I-OVER TO P-DIRECT-OVERHEAD.	CE002
00468	004590	MOVE INFO-ITEM-L-LABOR TO P-DIRECT-LABOR.	CE002
00469	004600	ADD 1 TO PAGE-NUMBER.	CE002
00470	004610	MOVE INFO-DES TO P-ITEM-DES.	CE002
00471	004620	MULTIPLY SUB-TOTAL-TIME BY INFO-ITEM-D-LABOR GIVING HOLDAREA.	CE002
00472	004630	MULTIPLY INFO BY INFO-ITEM--SCRAP GIVING P-REWORK.	CE002
00473	004640	MOVE HOLDAREA TO HOLDAREA-2.	CE002
00474	004650	MOVE ZEROS TO COST-LINE.	CE002
00475	004660	MOVE SUMMARY-LINE-1 TO SUMMARY-LINE.	CE002
00476	004670	MOVE PAGE-NUMBER TO PAGE-A.	CE002
00477	004680	MOVE PAGE-IT TO PUT-PAGE.	CE002
00478	004690	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL AFTER ADVANCING TO-TOP-OF-PAGE.	CE002
00479	004700	MOVE SPACES TO PUT-PAGE.	CE002
00480	004710	MOVE HOLDAREA TO COST-LINE.	CE002
00481	004720	MOVE SUMMARY-LINE-2 TO SUMMARY-LINE.	CE002
00482	004730	MULTIPLY HOLDAREA BY INFO-ITEM-I-OVER GIVING HOLDAREA.	CE002
00483	004740	MULTIPLY HOLDAREA BY HOLD GIVING HOLDAREA.	CE002
00484	004750	ADD HOLDAREA TO HOLDAREA-2.	CE002
00485	004760	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL AFTER ADVANCING 3 LINES.	CE002
00486	004770	MOVE ZEROS TO COST-LINE.	CE002
00487	004780	MOVE INFO-ITEM--REAP TO P-REALIZATION.	CE002
00488	004790		CE002
00489	004800		CE002
00490	004810		CE002

00492	004830	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00493	004840	AFTER ADVANCING 1.	CE002
00494	004850	MOVE HOLDAREA-2 TO COST-LINE.	CE002
00495	004860	MOVE INFO-ITEM-1-OVER TO P-DIRECT-OVERHEAD.	CE002
00496	004870	MOVE SUMMARY-LINE-4 TO SUMMARY-LINE.	CE002
00497	004880	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00498	004890	AFTER ADVANCING 3 LINES.	CE002
00499	004900	MOVE SUB-TOTAL-MATERIAL TO COST-LINE.	CE002
00500	004910	MOVE SUB-TOTAL-MATERIAL TO HOLDAREA.	CE002
00501	004920	ADD HOLDAREA-2 TO HOLDAREA.	CE002
00502	004930	MOVE SUMMARY-LINE-5 TO SUMMARY-LINE.	CE002
00503	004940	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00504	004950	AFTER ADVANCING 3 LINES.	CE002
00505	004960	ADD SUB-TOTAL-REC-TOOL TO HOLDAREA.	CE002
00506	004970	MOVE SUMMARY-LINE-6 TO SUMMARY-LINE.	CE002
00507	004980	MOVE SUB-TOTAL-REC-TOOL TO COST-LINE.	CE002
00508	004990	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00509	005000	AFTER ADVANCING 3 LINES.	CE002
00510	005010	MOVE HOLDAREA-2 TO COST-LINE.	CE002
00511	005020	MOVE SUMMARY-LINE-10 TO SUMMARY-LINE.	CE002
00512	005030	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00513	005040	AFTER ADVANCING 1.	CE002
00514	005050	MULTIPLY HOLDAREA BY INFO-ITEM--SCRAP GIVING HOLDAREA-2.	CE002
00515	005060	MOVE HOLDAREA-2 TO COST-LINE	CE002
00516	005070	COMPUTE P-DIRECT-OVERHEAD = 100 * INFO-ITEM-D-OVER.	CE002
00517	005080	MOVE SUMMARY-LINE-7 TO SUMMARY-LINE.	CE002
00518	005090	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00519	005100	AFTER ADVANCING 3 LINES.	CE002
00520	005110	ADD HOLDAREA-2 TO HOLDAREA.	CE002
00521	005120	MOVE HOLDAREA-2 TO COST-LINE.	CE002
00522	005130	MOVE SUMMARY-LINE-10 TO SUMMARY-LINE.	CE002
00523	005140	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00524	005150	AFTER ADVANCING 1.	CE002
00525	005160	COMPUTE P-REWORK = 100 * INFO-ITEM--REALP.	CE002
00526	005170	IF INFO-ITEM-G-A EQUAL TO ZERO	CE002
00527	005180	GO TO HEAD-2-A.	CE002
00528	005190	MULTIPLY HOLDAREA BY INFO-ITEM-G-A GIVING HOLDAREA-2.	CE002
00529	005200	ADD HOLDAREA-2 TO HOLDAREA.	CE002
00530	005210	MOVE HOLDAREA-2 TO COST-LINE	CE002
00531	005220	MULTIPLY 100 BY INFO-ITEM-G-A GIVING P-G-AND-A.	CE002
00532	005230	MOVE SUMMARY-LINE-8 TO SUMMARY-LINE.	CE002
00533	005240	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00534	005250	AFTER ADVANCING 3 LINES.	CE002

26

00536
00537
00538

005270
005280
005290

MOVE SUMMARY-LINE-10 TO SUMMARY-LINE.
WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL
• AFTER ADVANCING 1.

CE002
CE002
CE002

00540	005310	HEAD-2-A.	CE002
00541	005320	IF INFO-ITEM-FEE IS EQUAL TO ZERO	CE002
00542	005330	GO TO HEAD-2-B.	CE002
00543	005340	MULTIPLY HOLDAREA BY INFO-ITEM-FEE GIVING HOLDAREA-2.	CE002
00544	005350	ADD HOLDAREA-2 TO HOLDAREA.	CE002
00545	005360	MOVE HOLDAREA-2 TO COST-LINE.	CE002
00546	005370	MULTIPLY 100 BY INFO-ITEM-FEE GIVING P-FEE.	CE002
00547	005380	MOVE SUMMARY-LINE-9 TO SUMMARY-LINE.	CE002
00548	005390	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00549	005400	AFTER ADVANCING 3 LINES.	CE002
00550	005410	HEAD-2-B.	CE002
00551	005420	MOVE HOLDAREA TO COST-LINE.	CE002
00552	005430	MOVE SUMMARY-LINE-11 TO SUMMARY-LINE.	CE002
00553	005440	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00554	005450	AFTER ADVANCING 3 LINES.	CE002
00555	005460	IF SUB-TOTAL-NO-REC IS EQUAL TO ZERO	CE002
00556	005470	GO TO HEAD-2-C.	CE002
00557	005480	MOVE SUMMARY-LINE-12 TO SUMMARY-LINE.	CE002
00558	005490	MULTIPLY SUB-TOTAL-NO-REC BY 1000.0 GIVING COST-LINE.	CE002
00559	005500	WRITE PRINT-LINE FROM SUMMARY-LINE-TOTAL	CE002
00560	005510	AFTER ADVANCING 5 LINES.	CE002
00561	005520	HEAD-2-C.	CE002
00562	005530	MOVE HOLDAREA TO INFO-COST.	CE002
00563	005540	WRITE INFO-CARD INVALID KEY GO TO FINISH-REPORT.	CE002
00564	005550	P-H-EXIT.	CE002
00565	005560	EXIT.	CE002

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00567	005580	WRITE-HEADING-1.	CE002
00568	005590	MOVE SAME-HEAD TO DESCRIP-1.	CE002
00569	005600	ADD 1 TO PAGE-NUMBER	CE002
00570	005610	MOVE PAGE-NUMBER TO PAGE-NUM.	CE002
00571	005620	ADD 1 TO SHEET-NUM.	CE002
00572	005630	MOVE SHEET-NUM TO P-SHEET.	CE002
00573	005640	WRITE PRINT-LINE FROM HEADING-1	CE002
00574	005650	AFTER ADVANCING TO TOP-OF-PAGE.	CE002
00575	005660	WRITE PRINT-LINE FROM ASTERISK-LINE AFTER ADVANCING 2 LINES.	CE002
00576	005670	WRITE PRINT-LINE FROM BLANK-LINE AFTER ADVANCING 1.	CE002
00577	005680	WRITE PRINT-LINE FROM HEADING-2 AFTER ADVANCING 1.	CE002
00578	005690	WRITE PRINT-LINE FROM HEADING-3 AFTER ADVANCING 1.	CE002
00579	005700	WRITE PRINT-LINE FROM HEADING-4 AFTER ADVANCING 1.	CE002
00580	005710	WRITE PRINT-LINE FROM BLANK-LINE AFTER ADVANCING 1.	CE002
00581	005720	WRITE PRINT-LINE FROM ASTERISK-LINE AFTER ADVANCING 1.	CE002
00582	005730	MOVE 12 TO LINE-COUNT.	CE002

00584	005750	FINISH-REPORT-1.	CE002
00585	005760	CLOSE TREE-FILE.	CE002
00586	005770	NODE-FILE.	CE002
00587	005780	PRINT-FILL.	CE002
00588	005790	STOP RUN.	CE002

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APPENDIX D

Sample Problem

APPENDIX D

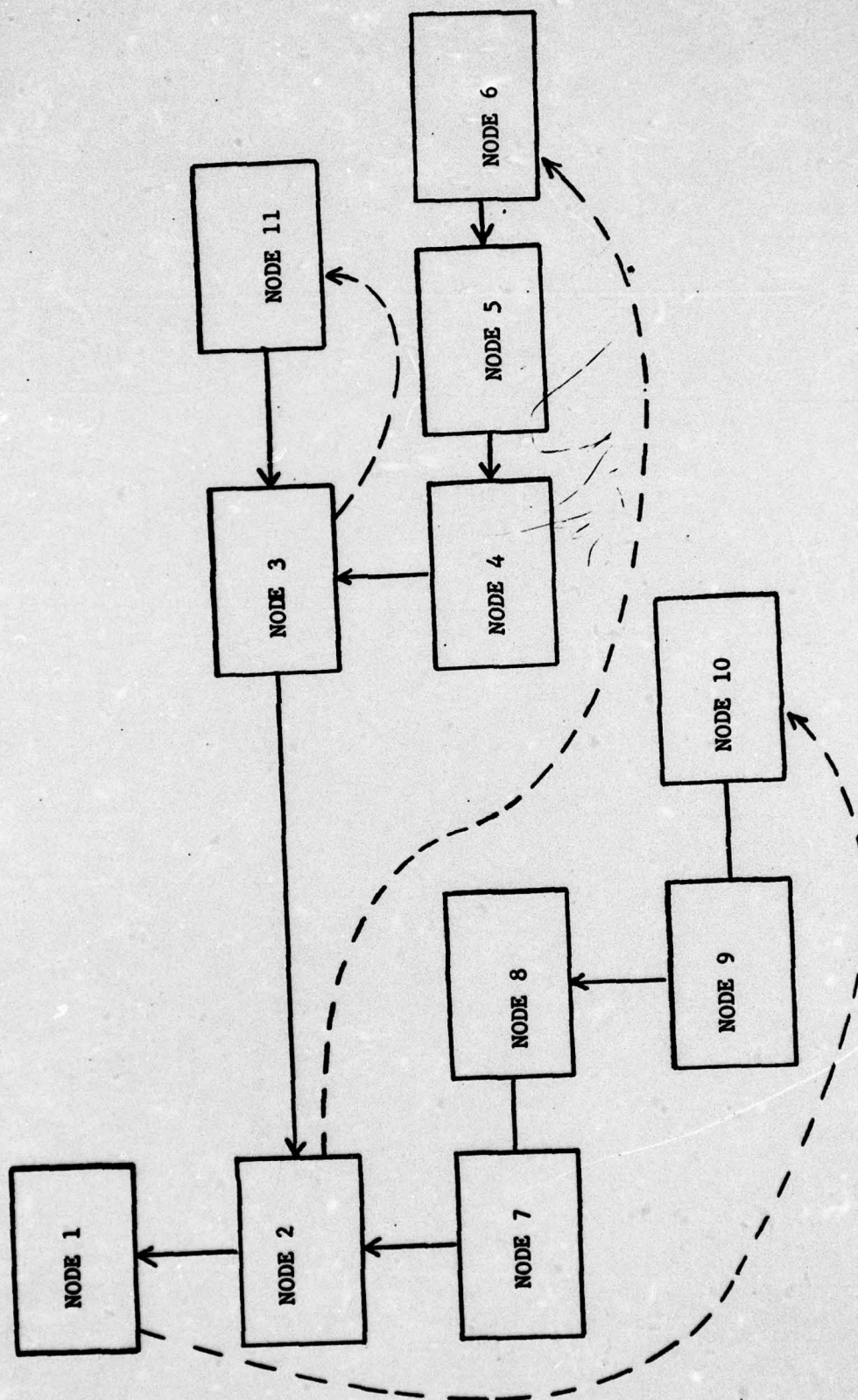
SAMPLE PROBLEM

The diagram on the next page represents a binary tree of a hypothetical product. The tree is the end result of applying the rules laid down earlier in the paper. The purpose of this appendix is to illustrate how to code the information necessary to generate the cost report.

Once the binary tree has been built, the first step in building the necessary files is to code the first data set comprising the pointers for the tree. The first step in performing this task is to list the node numbers in sequential order. Next the pointers must be built. If there is no pointer of a given type, a zero must be placed in the appropriate field. Refer to page 100 for the completed data set containing the pointers. Each of these cards has the format of Data Card #5.

Next the data file containing the information for the cost report must be created. The information which pertains to an individual node is written down on a series of cards. The cards used have the format of Data Cards #1, #2, #3, and #4. Pages 101 through 105 contain the data necessary to calculate the hypothetical product cost.

The first card in the group is Data Card #1. This card is to contain the node number of the node it refers to in field 2. Fields



3 and 4 contain zeros, and field 7 contains the name of the subassembly. Fields 10 through 14 contain the percentages needed to calculate the summary sheet. If a percentage is not applicable or is equal to zero, then zeros must be placed in the field. .

Data Cards #2, #3, and #4 comprise the rest of the cards which relate the information to the product. These cards all follow Data Card #1 in the representation of the node. Examples of how to code these cards are on pages 101 through 105.

Data Cards #3 and #4 should be placed following Data Card #1 with an operation number of 01. The statement number should be incremented by 1 from 0 to 9. This will place all subassembly and purchased parts at the start of the report for this node. If there are more than ten of these cards, they should be continued with operation number 02.

Once the data cards for each node have been coded, they must be placed together to form a data deck. This deck will form the second data file. The card immediately preceding this deck is to contain asterisks in columns 1 and 2. If this asterisk card is not there, the second file will not be correctly loaded. Onto the front of this set of cards the deck containing the pointers is added. The deck will now look like Figure 4.6 on page 42.

This data deck is then to be executed and a final cost report will be generated.

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FORTRAN Coding Form

JOB NAME		CEE 001-002 DATA SET #1		PAGE 1 OF 6	
PROGRAMMER		JOHN DOE		CARD READING MACHINE	
DATE					
PUNCHING INSTRUCTIONS		GRAPHIC PUNCH			

FORTRAN STATEMENT		IDENTIFICATION	
LINE	STATEMENT	CHARACTER	POSITION
1	0100 0010		
2	0201 0006		
3	0300 0211		
4	0403 0000		
5	0500 0400		
6	0600 0500		
7	0700 0000		
8	0800 0700		
9	0908 0000		
10	1000 0900		
11	1100 0300		
12	DOWN POINTER		
13	BROTHER POINTER		
14	FATHER POINTER		
15	HOME NODE		

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**Number of forms per page - 1 only required

FORTAN STATEMENT					
DATE	TIME	FROM	TO	BY	REMARKS
01000		FINAL PRODUCT			
01001		OPERATION 1			
01002		OPERATION 2			
01003		OPERATION 3			
01004		OPERATION 4			
01005		OPERATION 5			
01006		CONTINUED			
01007		OPERATION 6			
01008		OPERATION 7			
01009		OPERATION 8			
01010		OPERATION 9			
01011		OPERATION 10			
01012		CONTINUED			
01013		OPERATION 11			
01014		OPERATION 12			
01015		OPERATION 13			
01016		OPERATION 14			
01017		OPERATION 15			

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TIME
MATERIALS

LEWIS

NO.	DATE	TIME	GRAPHIC	PUNCH	PAGE
0001-002	01/11/68	09:00			36
DATA SET #2					
JPM/11/68					
INSTRUCTIONS					

[illegible]

IBM

FORTRAN Coding Form

CE001-002	DATA SET #2	DATE	GRAPHIC PUNCH	FINCHING INSTR. NO. 4	46
JOHN DOE					

FORTRAN STATEMENT		LINE NO.		COLUMN NO.	
1	2	3	4	5	6
02100	OPERATION 10	10	11	12	13
02110	OPERATION 11	14	15	16	17
02120	OPERATION 12	18	19	20	21
02130	OPERATION 13	22	23	24	25
02140	OPERATION 14	26	27	28	29
02150	OPERATION 15	30	31	32	33
02160	OPERATION 16	34	35	36	37
02170	OPERATION 17	38	39	40	41
02180	OPERATION 18	42	43	44	45
02190	OPERATION 19	46	47	48	49
03000	SUBASSEMBLY 3	50	51	52	53
04010	40405	54	55	56	57
03011	40501	58	59	60	61
03012	40602	62	63	64	65
03015	+PURCHASED PART 5	66	67	68	69
03014	+PURCHASED PART 6	70	71	72	73
03020	OPERATION 2	74	75	76	77
03030	OPERATION 3	78	79	80	81
03040	OPERATION 4	82	83	84	85
03050	OPERATION 5	86	87	88	89
03060	OPERATION 6	90	91	92	93
04000	SUBASSEMBLY 4	94	95	96	97
04010	OPERATION 1	98	99	100	101
04020	OPERATION 2	102	103	104	105

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104

PORTRAM Coding Form

FORM		DATE SET #2		DATE		PUNCHING INSTRUCTIONS		GRAPHIC PUNCH		PAGE 56	
CEE001-002		JOHN DOE									

FORTRAN STATEMENT											
LINE	STATEMENT	1	2	3	4	5	6	7	8	9	10
0001	OPERATION 3										
0002	OPERATION 4										
0003	OPERATION 5										
0004	OPERATION 6										
0005	OPERATION 7										
0006	OPERATION 8										
0007	OPERATION 9										
0008	SUBMISSY 5										
0009	OPERATION 1										
0010	OPERATION 2										
0011	OPERATION 3										
0012	OPERATION 4										
0013	SUBMISSY 6										
0014	OPERATION 1										
0015	OPERATION 2										
0016	OPERATION 3										
0017	SUBMISSY 7										
0018	OPERATION 1										
0019	OPERATION 2										
0020	OPERATION 3										
0021	SUBMISSY 8										
0022	OPERATION 1										
0023	OPERATION 2										
0024	OPERATION 3										
0025	SUBMISSY 9										
0026	OPERATION 1										
0027	OPERATION 2										
0028	OPERATION 3										
0029	SUBMISSY 10										
0030	OPERATION 1										
0031	OPERATION 2										
0032	OPERATION 3										
0033	SUBMISSY 11										
0034	OPERATION 1										
0035	OPERATION 2										
0036	OPERATION 3										
0037	SUBMISSY 12										
0038	OPERATION 1										
0039	OPERATION 2										
0040	OPERATION 3										
0041	SUBMISSY 13										
0042	OPERATION 1										
0043	OPERATION 2										
0044	OPERATION 3										
0045	SUBMISSY 14										
0046	OPERATION 1										
0047	OPERATION 2										
0048	OPERATION 3										
0049	SUBMISSY 15										
0050	OPERATION 1										
0051	OPERATION 2										
0052	OPERATION 3										
0053	SUBMISSY 16										
0054	OPERATION 1										
0055	OPERATION 2										
0056	OPERATION 3										
0057	SUBMISSY 17										
0058	OPERATION 1										
0059	OPERATION 2										
0060	OPERATION 3										
0061	SUBMISSY 18										
0062	OPERATION 1										
0063	OPERATION 2										
0064	OPERATION 3										
0065	SUBMISSY 19										
0066	OPERATION 1										
0067	OPERATION 2										
0068	OPERATION 3										
0069	SUBMISSY 20										
0070	OPERATION 1										
0071	OPERATION 2										
0072	OPERATION 3										
0073	SUBMISSY 21										
0074	OPERATION 1										
0075	OPERATION 2										
0076	OPERATION 3										
0077	SUBMISSY 22										
0078	OPERATION 1										
0079	OPERATION 2										
0080	OPERATION 3										
0081	SUBMISSY 23										
0082	OPERATION 1										
0083	OPERATION 2										
0084	OPERATION 3										
0085	SUBMISSY 24										
0086	OPERATION 1										
0087	OPERATION 2										
0088	OPERATION 3										
0089	SUBMISSY 25										
0090	OPERATION 1										
0091	OPERATION 2										
0092	OPERATION 3										
0093	SUBMISSY 26										
0094	OPERATION 1										
0095	OPERATION 2										
0096	OPERATION 3										
0097	SUBMISSY 27										
0098	OPERATION 1										
0099	OPERATION 2										
0100	OPERATION 3										

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